DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: <u>SF/ALA</u> Rte: <u>80</u> PM: <u>13.2/13.9</u>

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer:Pursell, Gary **Report No:** WIR-013927 **Address:** 333 Burma Road **Date Inspected:** 10-May-2010

City: Oakland, CA 94607

Project Name: SAS Superstructure OSM Arrival Time: 900
Prime Contractor: American Bridge/Fluor Enterprises, a JV OSM Departure Time: 1700

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island Location: Shanghai, China

CWI Name: CWI Present: Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

Bridge No: 34-0006 Component: OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

This QA inspector performed UT of approximately 10% of the repaired area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member(s) is/are identified as Floor beam member (Inspection request # 005699). The weld designations reviewed are as follows:

1. FB014-001-050, 051, 052

8BE+8CE

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 159 located at SP539-001 cross beam side of segment. Welder is identified as Mr. Zhang Hanming (220066). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-3G (3F)-Repair-1 and WR12680 procedure.

8AW+8BW

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 019 and 021 located at DP652-001 cross beam side of segment. Welder is identified as Mr. Li Zaijun (037996). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-3213-B-U4b.

7DW+7EW

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 008 located at OBW7C bottom plate segment splice. Welder is identified as Mr. Zhang Quanfa (066326). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-4G (4F)-Repair-1.

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 008 located at OBW7C bottom plate segment splice. Welder is identified as Mr. Zang Yanbo (045196). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-4G (4F)-Repair-1.

7EE

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 006 located at CA046-001 bike path side of segment. Welder is identified as Mr. Wang Zhengbin (216086). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-2G (2F)-FCM –Repair-1 and CWR1471 procedure.

Y Location of repairs areas by above noted welder (216086) is located at 20~700mm.

7DW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 005 located at CA041 counter weight side of segment. Welder is identified as Mr. Yu Huiye (045143). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2232-Tc-U4b-F.

7EW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 001 located at CA043 counter weight side of segment. Welder is identified as Mr. Yu Huiye (045143). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2232-Tc-U4b-F.

Miscellaneous Work In Progress

QA Inspector observed ZPMC's personnel performing various job functions at Tail Assembly Yard. Locations and description of work are as followed:

8CE

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

- 1. Heat straightening was performed on FB member FB20B located bike path side of segment at panel point 68 per HSR1 (B)-8379.
- 2. Heat straightening was performed on FB member FB24A located bike path side of segment at panel point 69 per HSR1 (B)-8379.

8AE+8BE

- 1. Ut reject excavation in progress at the side plate to side plate weld joint OBE8-002 located on the deck plate splice. Y locations are as followed: 1610mm
- 2. Ut reject excavation in progress at the side plate to side plate weld joint OBE8-003 located on the deck plate splice. Y locations are as followed: 1500mm

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (150-0042-2372), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer